IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant:	Mark Hirst	Examiner: Ren Luo Yan
Serial No.:	10/684,634	Group Art Unit: 2854
Filed:	October 14, 2003	Docket: 200309672-1
Due Date:	July 12, 2008	
Title:	APPARATUS HAVING ACTUATING MEMBER	

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir/Madam:

This Appeal Brief is submitted in support of the Notice of Appeal filed on May 12, 2008, appealing the final rejection of claims 2-6, 31-34, and 36-38, and the objection to claim 35 of the above-identified application as set forth in the Final Office Action mailed February 12, 2008.

The U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 50-0471 in the amount of $510.00 for filing a Brief in Support of an Appeal as set forth under 37 C.F.R. § 41.20(b)(2). At any time during the pendency of this application, please charge any required fees or credit any overpayment to Deposit Account No. 50-0471.

Appellant respectfully requests consideration and reversal of the Examiner's rejection of pending claims 2-6 and 31-38.

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REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant that will have a bearing on the Board's decision in the present Appeal.

STATUS OF CLAIMS

In a Final Office Action mailed February 12, 2008, claims 1-6, 31-34, and 36-41 were finally rejected. Claim 35 was objected to. Claims 1 and 39-41 have been cancelled without prejudice. Claims 7-30 and 42-49 have been withdrawn. Claims 2-6 and 31-38 remain pending in the application and are the subject of the present Appeal.

STATUS OF AMENDMENTS

No amendments have been filed subsequent to the Amendment and Response to the Final Office Action mailed April 14, 2008.

SUMMARY OF THE CLAIMED SUBJECT MATTER

The subject matter of the claims involved in the Appeal is related to an apparatus for separating platen rollers of a fuser assembly, such as employed by a laser printer, for example, which is powered by electrical energy generated from heat from the fuser assembly.

One aspect of the present invention, as claimed by independent claim 2, provides an apparatus (24/124) including a thermoelectric generator (32/132) thermally coupled to a fuser assembly (22/122) having a member (148) and a pair of platen rollers (28/128) pressed together to form a fusing nip (30/130), the thermoelectric generator (32/132) configured to convert heat from the fuser assembly (22/122) to an electrical energy, and a mechanism (38/138) comprising a motor (146) configured to actuate the member (148) using the electrical energy, wherein the member (148) is configured to separate the platen rollers (28/128) when actuated by the motor (146). *See Specification*, at page 3, line 20 through page 8, line 6; and Figures 1 and 2.

Another aspect of the present invention, as claimed by independent claim 31, provides an imaging system (180) including a power supply (196) configured to provide a first electrical energy having a first parameter level, a fuser assembly (222) that generates heat and including a pair of opposing platen rollers (228) supported by a housing (232) and pressed together to form a fusing nip (230), and a depressurization system (224). The depressurization system (224) includes a thermoelectric generator (232) adapted to thermally couple to the fuser assembly (222) and configured to convert heat from the fuser assembly (222) to a second electrical energy, and a separator assembly (234) configured to receive the first electrical energy having the first parameter level and the second electrical energy. The separator assembly includes a separator mechanism (238,234) mechanically coupled to the fuser assembly (222) and configured to separate the platen rollers (228) in response to the second electrical energy, and a controller (240) configured to monitor the first parameter level of first electrical energy and upon detecting that the first parameter level is less than or substantially equal to a threshold level to cause the separator mechanism (238,244) to be powered by the second electrical energy to thereby separate the platen rollers (228). *See Specification*, at page 8, line 7 through page 10, line 26; and Figure 4.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

I. Claims 2-6, 31-34, and 36-38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Negoro et al U.S. Patent No. 5,023,667 in view of Suski U.S. Patent No. 5,419,780 and McLay et al. U.S. Patent No. 4,072,825.

ARGUMENT

I. The Applicable Law

To anticipate a claim under 35 U.S.C. 102, a reference must teach every limitation of the claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 [2 USPQ2d 1051, 1053] (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference"). *See also Atlas Power Co. v. IRECO Inc.*, 190 F.3d 1342, 1347 [51 USPQ2d 1943, 1946] (Fed. Cir. 1999).

With regard to a 35 U.S.C. § 103 obviousness rejection: "Patent examiners carry the responsibility of making sure that the standard of patentability enunciated by the Supreme Court and by the Congress is applied in each and every case." M.P.E.P. 2141 (emphasis in the original). The Examiner bears the burden under 35 U.S.C. § 103 in establishing a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074 [5 USPQ2d 1596, 1598] (Fed. Cir. 1988).

One criteria that must be satisfied to establish a *prima facie* case of obviousness is the reference or combined references must teach or suggest all of the claim limitations. *In re Royka*, 490 F.2d 981 [180 USPQ 580] (C.C.P.A. 1974).

However, "[a] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR Int'l Co. v. Teleflex, Inc.,* 127 S. Ct. 1727, 1731 [82 USPQ2d 1385, 1389] (2007). In making an obviousness determination over a combination of prior art references, it is "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *Id. at* 1738 [1396].

In order to facilitate review of the determination of whether there was an apparent reason to combine known elements in the fashion claimed by the patent at issue, the "analysis should be made explicit." *Id. at* 1738 [1396]. "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988 [78 USPQ2d 1329] (Fed. Cir. 2006) (cited with approval in *KSR*, 127 S. Ct. at 1738 [82 USPQ+2d at 1396]). In this regard, identification of a teaching, suggestion, or motivation for modifying a reference or combination of the teachings of multiple references provides helpful insight. *KSR*, 127 S. Ct. at 1741.

The test for obviousness under § 103 must take into consideration the invention as a whole; that is, one must consider the particular problem solved by the combination of elements that define the invention. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143 [227 USPQ 543, 551] (Fed. Cir. 1985). Furthermore, claims must be interpreted in light of the specification, claim language, other claims, and prosecution history. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1568 [1 USPQ2d 1593, 1597] (Fed. Cir. 1987), *cert. denied*, 481 U.S. 1052 (1987). At the same time, a prior patent cited as a § 103 reference must be considered in its entirety, "*i.e.* as a *whole*, including portions that lead away from the invention." *Id.* That is, the Examiner must recognize and consider not only the similarities, but also the critical differences between the claimed invention and the prior art as one of the factual inquiries pertinent to any obviousness inquiry under 35 U.S.C. § 103. *In re Bond*, 910 F.2d 831, 834 [15 USPQ2d 1566, 1568] (Fed. Cir. 1990) (emphasis added).

Furthermore, the Examiner must avoid hindsight. *Id.* "A fact finder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning." *KSR,* 127 S. Ct. at 1739 [82 USPQ2d at 1397] (citing to *Graham v. John Deere*, 383 U.S. 1 [148 USPQ 459] (1966) in warning against a temptation to read into the prior art the teachings of the invention at issue and instructing courts to guard against slipping into the use of hindsight).

"[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious." *KSR,* 127 S. Ct. at 1737 [82 USPQ2d at 1395] (citing to *United States v. Adams*, 383 U.S. 39, 51-52 [148 USPQ 479] (1966).

In conclusion, an Appellant is entitled to a patent grant if a *prima facie* case of obviousness is not established. The Federal Circuit has endorsed this view in stating: "If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the Appellant is entitled to grant of the patent." In re Oetiker, 977 F.2d 1443, 1446 [24 USPQ2d 1443, 1448] (Fed. Cir. 1992).

II. Rejection of claims 2-6, 31-34, and 36-38 under 35 U.S.C. § 103(a) as being unpatentable over Negoro et al U.S. Patent No. 5,023,667 in view of Suski U.S. Patent No. 5,419,780 and McLay et al. U.S. Patent No. 4,072,825.

The combination of the Negoro et al. Patent and the Suski and McLay et al. Patents fail to render independent claim 2 *prima facie* obvious. Appellant submits that the Negoro et al., Suski, and McLay et al. Patents, either alone or in combination, fail to teach or suggest the limitations recited by independent claim 2.

The Negoro et al. Patent describes a laser printer 10 which prints out information from computers etc. onto a continuous form 20 or recording paper (Col. 5, lines 26-28). Laser printer 10 includes a fixing unit 8 comprising a fixing roller pair 81 consisting of a heat roller 81A and a backup roller 81B (Col. 6, lines 52-53). The laser printer further includes a gear motor 10 driven to operate a cam 83 to cause a backup roller 81B to press against a heat roller 81A when in a fixing operative position (i.e. when the laser printer is printing) and driven to operate cam 83 to cause backup roller 81B to move apart from heat roller 81A when the laser printer is in a "print stand-by state" (Col. 7, Lines 17-35; Col. 8, Lines 19-32, Abstract, and Figures 2 and 3).

The Final Office Action acknowledges that the Negoro et al. Patent fails to teach a **thermoelectric generator thermally coupled to a fuser assembly and configured to convert heat from the fuser assembly to an electrical energy and using the electrical energy to drive a motor to separate a pair of platen rollers**, as defined by independent claim 2. However, the Final Office Action asserts that such limitations would be obvious in view of the Suski Patent.

The Suski Patent describes a thermoelectric generator 50 (e.g. a peltier device) coupled to and configured to convert heat from a semiconductor device 12 to electrical energy which is used to power a fan 70 to cool the semiconductor device 12 (Abstract, Figures 3-5), thereby enabling the semiconductor device to be cooled without requiring or increasing power consumption from a normal source of power of an associated computer system, such as batteries of a laptop computer (Col. 4, lines 29-57). The Final Office Action asserts that it would have been obvious to employ thermoelectric generator 50 of the Suski Patent in the laser printer 10 of the Negoro et al. Patent so as to power the fixing unit 8 from the heat of heat roller 81A in order to cut energy costs and improve the operating efficiency of laser printer 10 of the Negoro et al. Patent.

However, the Negoro et al. Patent makes no mention of any type of power source for powering gear motor 10, let alone using a non-conventional type of power source, such as a thermoelectric generator. The Negoro et al. Patent is concerned only with separating the continuous form 20 from heat roller 81A when laser printer 10 is in a "print stand-by state" so as to prevent problems associated with continuous application of heat to continuous form 20, such as blistering and burning (Col 2, lines 4-12; and Col. 8, lines 19-32). The Negoro et al. Patent makes no mention of any type of power source for powering gear motor 10 and makes no mention of operating costs or energy efficiency associated with power consumption since laser printer 10 is not operating from a battery source as is the case with semiconductor device 10 of the Suski Patent.

In view of the above, there would be no reason or motivation whatsoever for one of ordinary skill in the art at the time of the invention to combine the teachings of laser printer 10 of the Negoro et a. Patent with the semiconductor cooling device described by the Suski Patent. As such, Appellant respectfully submits that **a thermoelectric generator thermally coupled to and configured to convert heat from a fuser assembly to an electrical energy, and a motor using the electrical energy to separate a pair of platen rollers**, as defined by independent claim 2, is non-obvious over the Negoro et al. Patent in view of the Suski Patent. As such, Appellant respectfully requests reversal of the rejection of claim 2 under 35 U.S.C. § 103(a).

Accordingly, since neither Negoro nor Suski teach or suggest **a thermoelectric generator thermally coupled to and configured to convert heat from a fuser assembly to an electrical energy, and a motor using the electrical energy to separate a pair of platen rollers**, Appellant respectfully submits that the teachings of the Negoro et al. Patent cannot be combined with those of the Suski Patent to teach or suggest the present invention as recited by claim 2. As such, Appellant respectfully requests reversal of the rejection of claim 2 under 35 U.S.C. § 103(a).

With respect to claim 3, in addition to the above described limitations of claim 2, claim 3 includes the further limitations of **a controller configured to monitor a normal energy source**

and to separate the pair of platen rollers using the electrical energy provided by the thermoelectric generator in response to the normal energy source having a level less than or equal to a threshold level. In addition to being allowable for depending from and further defining independent claim 2, which Appellant believes to be in allowable form, Appellant further submits that claim 3 is independently allowable and is non-obvious as neither Negoro, Suski, nor McLay, either alone or in combination, teach or suggest the present invention as defined by claim 3.

Again, as described above, the Negoro et al. Patent makes no mention of any source for powering gear motor 10, let alone being powered by **a normal energy source and by an electrical energy provided by a thermoelectric generator in response to the normal energy source having a level less than or equal to a threshold level**, as defined by claim 3. Suski discloses employing electrical energy from thermoelectric generator 50 to power fan 70. However, the Suski Patent also fails to teach or suggest powering fan 70 fan with **a normal energy source and with electrical energy from the thermoelectric generator in response to the normal energy source having a level less than or equal to a threshold level**. In fact, the Suski Patent teaches that the primary advantage of using thermoelectric energy converted by thermoelectric generator 50 from heat generated by semiconductor device 12 to power fan 70 is that the fan is not powered by a normal power source (e.g. batteries of a laptop computer) and, thus, does not increase power consumption of the computer system (Col. 4, Lines 29-57). In view of the above, the Suski Patent teaches using only a single power source other than a normal power source to power fan 70 and, as such, teaches away from the present invention as described by the limitations of claim 3.

In view of the above, since the Suski Patent teaches away from the present invention as defined by claim 3, Appellants respectfully submit that the teachings neither the Negoro et al. Patent nor the McLay et al. Patent, either alone or in combination, can be combined with the teachings of the Suski Patnet to teach or suggest the present invention as defined by dependent claim 3. As such, Appellant respectfully submits that an apparatus powered via a normal energy source and **a controller configured to monitor a normal energy source and to separate the pair of platen rollers using the electrical energy provided by the thermoelectric generator**

in response to the normal energy source having a level less than or equal to a threshold level, as defined by dependent claim 3, is non-obvious over the Negoro et al. Patent in view of the Suski Patent and the McLay et al. Patent. As such, Appellant respectfully requests reversal of the rejection of dependent claim 3 under 35 U.S.C. § 103(a).

With respect to independent claim 31, independent claim 31 includes limitations similar to those described above with respect to dependent claim 3. As such, for reasons similar to those described above with respect to independent claim 2 and dependent claim 3, Appellant respectfully submits that independent claim 31 is also allowable over the art of record. Accordingly, Appellant respectfully requests reversal of the rejection of independent claim 31 under 35 U.S.C. § 103(a).

Dependent claims 4-6 depend either directly or indirectly from and further define patentably distinct independent claim 2, and dependent claims 32-34 and 36-38 depend either directly or indirectly from and further define patentably distinct independent claim 31. As such, Appellant respectfully requests reversal of the rejection of dependent claims 4-6, 32-34, and 36-38 under 35 U.S.C. § 103(a).

III. Objection to claim 35 in the Final Office Action mailed February 12, 2008, as being dependent on a rejected base claim, but as being allowable if rewritten in independent form including all limitations of the base claim and any intervening claims.

Claim 35 includes allowable subject matter in independent form.

In the Amendment and Response to the Final Office Action, filed on February 12, 2008, claim 35 was rewritten independent form including all limitations of claim 31 and 34 from which it formerly depended.

In view of the above, Appellant respectfully requests removal of the objection to claim 35.

CONCLUSION

For the above reason, Appellant respectfully submits that the cited references neither anticipate nor render obvious the pending claims of the Present Application. The pending claims distinguish over the cited references, and therefore, Appellant respectfully submits that the rejections must be withdrawn, and respectfully request the Examiner be reversed and claims 2-6 and 31-38 be allowed.

Any inquiry regarding this Appeal Brief should be directed to Steven E. Dicke at Telephone No. (612) 573-2002, Facsimile No. (612) 573-2005. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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Dated: __August 12, 2008____________ _/Steven E. Dicke/_____________
SED:cjs

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CLAIMS APPENDIX

1. (Cancelled)

2. (Previously Presented) An apparatus comprising:

a thermoelectric generator thermally coupled to a fuser assembly having a member and a pair of platen rollers pressed together to from a fusing nip, the thermoelectric generator configured to convert heat from the fuser assembly to an electrical energy; and

a mechanism comprising a motor configured to actuate the member using the electrical energy, wherein the member is configured to separate the platen rollers when actuated by the motor.

3. (Original) The apparatus of claim 2, wherein the apparatus is powered via a normal energy source, the apparatus further comprising:

a controller configured to monitor the normal energy source compared to a threshold parameter level, and to selectively actuate the member via the electrical energy to separate the platen rollers in response to the monitored normal energy source having a parameter level less than or substantially equal to the threshold parameter level.

4. (Original) The apparatus of claim 3, wherein the motor is configured to operate as a fuser motor when the apparatus is powered via the normal energy source.

5. (Original) The apparatus of claim 3, wherein the threshold parameter is a voltage level.

6. (Previously Presented) The apparatus of claim 2, wherein the thermoelectric generator comprises:

a Peltier device operating in a Seebeck mode.

7. (Withdrawn) A depressurization system configured to receive a first electrical energy having a first parameter level and to couple to a fuser assembly that generates heat and includes a pair of opposing platen rollers pressed together to form a fusing nip, the depressurization system comprising:

a thermoelectric generator adapted to thermally couple to the fuser assembly and configured to convert heat from the fuser assembly to a second electrical energy; and

a separator assembly configured to receive the first electrical energy having the first parameter level and the second electrical energy, the separator assembly comprising:

a separator mechanism mechanically coupled to the fuser assembly and configured to separate the platen rollers in response to the second electrical energy; and

a controller configured to monitor the first parameter level of first electrical energy and upon detecting that the first parameter level is less than or substantially equal to a threshold level to cause the separator mechanism to be powered by the second electrical energy to thereby separate the platen rollers.

8. (Withdrawn) The depressurization system of claim 7, wherein the threshold level is substantially equal to zero.

9. (Withdrawn) The depressurization system of claim 7, wherein the first and second energy levels each comprise a voltage.

10. (Withdrawn) The depressurization system of claim 7, wherein the first electrical energy is provided by a power supply of an imaging device of which the fuser assembly is included.

11. (Withdrawn) The depressurization system of claim 7, wherein the thermoelectric generator comprises:

a first surface mechanically and thermally coupled to a frame of an imaging device of which the fuser assembly is included; and a second surface thermally coupled only to the fuser assembly to thereby allow removal of the fuser assembly from the imaging device.

12. (Withdrawn) The depressurization system of claim 11, wherein a heat conductive elastomer is positioned between the second surface and the fuser assembly and adhered only to the second surface so as to contact the fuser assembly.

13. (Withdrawn) The depressurization system of claim 11, wherein the thermoelectric generator comprises:

a Peltier device operating in a Seebeck mode.

14. (Withdrawn) The depressurization system of claim 13, wherein the first surface comprises a cold junction and the second surface comprises a hot junction.

15. (Withdrawn) The depressurization system of claim 11, wherein the first surface is thermally coupled only to the frame and the second surface is mechanically and thermally coupled to the fuser assembly to thereby allow removal of the fuser assembly and associated thermoelectric generator from the imaging device.

16. (Withdrawn) The depressurization system of claim 7, wherein the separator mechanism further comprises:

a cam mechanism mechanically coupled to the fuser assembly and configured to engage and separate the platen rollers when each of the platen roller rotates in a reverse direction, and configured not to engage and separate the platen rollers when each of the platen rollers rotates in a forward direction; and

an electric motor mechanically coupled to the fuser assembly via a linkage, wherein the electric motor causes each of the platen rollers to rotate in a reverse direction in response to the first electrical energy to thereby cause the cam mechanism to engage and separate the platen rollers.

17. (Withdrawn) The depressurization system of claim 16, wherein the electric motor comprises a fuser motor, and wherein the controller is further configured to cause the fuser motor to be powered by the first electrical energy when the first parameter level is greater than the threshold level to cause each of the platen rollers to rotate in the forward direction to thereby cause a print material to pass through the fusing nip.

18. (Withdrawn) The depressurization system of claim 17, wherein when the fuser motor is powered by the first energy level the controller is further configured to cause the fuser motor to operate each of the platen rollers in the reverse direction when the print material is jammed in the fuser assembly and when a switch associated with the first energy level is in an open position.

19. (Withdrawn) A fusing system comprising:

a fuser assembly that generates heat and comprises:

a pair of opposing platen rollers supported by a housing and pressed together to form a fusing nip; and

a depressurization system configured to receive a first electrical energy having a first parameter level and comprising:

a thermoelectric generator adapted to thermally couple to the fuser assembly and configured to convert heat from the fuser assembly to a second electrical energy; and

a separator assembly configured to receive the first electrical energy having the first parameter level and the second electrical energy, the separator assembly comprising:

a separator mechanism mechanically coupled to the fuser assembly and configured to separate the platen rollers in response to the second electrical energy; and

a controller configured to monitor the first parameter level of first electrical energy and upon detecting that the first parameter level is less than or substantially equal to a threshold level to cause the separator mechanism to be powered by the second electrical energy to thereby separate the platen rollers.

20. (Withdrawn) The fusing system of claim 19, wherein the threshold level is substantially equal to zero.

21. (Withdrawn) The fusing system of claim 19, wherein the first and second energy levels each comprise a voltage.

22. (Withdrawn) The fusing system of claim 19, wherein the first electrical energy is provided by a power supply of an imaging device of which the fusing system is included.

23. (Withdrawn) The fusing system of claim 19, wherein the thermoelectric generator comprises:

a first surface mechanically and thermally coupled to a frame of an imaging device of which the fuser assembly is included; and

a second surface thermally coupled only to the fuser assembly to thereby allow removal of the fuser assembly from the imaging device.

24. (Withdrawn) The fusing system of claim 23, wherein a heat conductive elastomer is positioned between the second surface and the fuser assembly and adhered to only the second surface so as to contact the fuser assembly.

25. (Withdrawn) The fusing system of claim 23, wherein the thermoelectric generator comprises:

a Peltier device operating in a Seebeck mode.

26. (Withdrawn) The fusing system of claim 25, wherein the first surface comprises a cold junction and the second surface comprises a hot junction.

27. (Withdrawn) The fusing system of claim 23, wherein the first surface is thermally coupled only to the frame and the second surface is mechanically and thermally coupled to the fuser assembly to thereby allow removal of the fuser assembly and associated thermoelectric generator from the imaging device.

28. (Withdrawn) The fusing system of claim 19, wherein the separator mechanism further comprises:

a cam mechanism mechanically coupled to the fuser assembly configured to engage and separate the platen rollers when each of the platen roller rotates in a reverse direction and configured not to engage and separate the platen rollers when each of the platen rollers rotates in a forward direction; and

an electric motor mechanically coupled to the fuser assembly via a linkage, wherein the electric motor causes each of the platen rollers to rotate in a reverse direction in response to the second electrical energy to thereby cause the cam mechanism to engage and separate the platen rollers.

29. (Withdrawn) The fusing system of claim 28, wherein the electric motor comprises a fuser motor, and wherein the controller is further configured to cause the fuser motor to be powered by the first electrical energy when the first parameter level is greater than the threshold level to cause each of the platen rollers to rotate in the forward direction to thereby cause a print material to pass through the fusing nip.

30. (Withdrawn) The fusing system of claim 29, wherein when the fuser motor is powered by the first energy level the controller is further configured to cause the fuser motor to operate each of the platen rollers in the reverse direction when the print material is jammed in the fuser assembly and when a switch associated with the first energy level is in an open position.

31. (Original) An imaging system comprising:

a power supply configured to provide a first electrical energy having a first parameter level;

a fuser assembly that generates heat and comprises:

a pair of opposing platen rollers supported by a housing and pressed together to form a fusing nip; and

a depressurization system comprising:

a thermoelectric generator adapted to thermally couple to the fuser assembly and configured to convert heat from the fuser assembly to second electrical energy; and

a separator assembly configured to receive the first electrical energy having the first parameter level and the second electrical energy, the separator assembly comprising:

a separator mechanism mechanically coupled to the fuser assembly and configured to separate the platen rollers in response to the second electrical energy; and

a controller configured to monitor the first parameter level of first electrical energy and upon detecting that the first parameter level is less than or substantially equal to a threshold level to cause the separator mechanism to be powered by the second electrical energy to thereby separate the platen rollers.

32. (Original) The imaging system of claim 31, wherein the threshold level is substantially equal to zero.

33. (Original) The imaging system of claim 31, wherein the first and second energy levels each comprise a voltage.

34. (Original) The imaging system of claim 31, wherein the thermoelectric generator comprises:

a first surface mechanically and thermally coupled to a frame of the imaging system; and

a second surface thermally coupled only to the fuser assembly housing to thereby allow removal of the fuser assembly from the imaging device.

35. (Presently Presented) An imaging system comprising:

a power supply configured to provide a first electrical energy having a first parameter level;

a fuser assembly that generates heat and comprises:

a pair of opposing platen rollers supported by a housing and pressed together to form a fusing nip; and

a depressurization system comprising:

a thermoelectric generator adapted to thermally couple to the fuser assembly and configured to convert heat from the fuser assembly to second electrical energy; and

a separator assembly configured to receive the first electrical energy having the first parameter level and the second electrical energy, the separator assembly comprising:

a separator mechanism mechanically coupled to the fuser assembly and configured to separate the platen rollers in response to the second electrical energy; and

a controller configured to monitor the first parameter level of first electrical energy and upon detecting that the first parameter level is less than or substantially equal to a threshold level to cause the separator mechanism to be powered by the second electrical energy to thereby separate the platen rollers;

wherein the thermoelectric generator comprises:

a first surface mechanically and thermally coupled to a frame of the imaging system; and

a second surface thermally coupled only to the fuser assembly housing to thereby allow removal of the fuser assembly from the imaging device, wherein a heat conductive elastomer is positioned between the second surface and the fuser assembly housing and adhered to only the second surface so as to contact the fuser assembly.

36. (Original) The imaging system of claim 34, wherein the thermoelectric generator comprises:

a Peltier device operating in a Seebeck mode.

37. (Original) The imaging system of claim 36, wherein the first surface comprises a cold junction and the second surface comprises a hot junction.

38. (Original) The imaging system of claim 34, wherein the first surface is thermally coupled only to the frame and the second surface is mechanically and thermally coupled to the fuser assembly to thereby allow removal of the fuser assembly and associated thermoelectric generator from the imaging device.

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Withdrawn) A method for moving a member comprising:
converting heat from an assembly to an electrical energy; and
actuating a member using the electrical energy.

43. (Withdrawn) The method of claim 42, further comprising:
providing a thermoelectric generator to convert heat from the assembly to the electrical energy.

44. (Withdrawn) The method of claim 43, further comprising:
providing a thermoelectric generator comprising a Peltier device operating in a Seebeck mode.

45. (Withdrawn) The method of claim 43, further comprising:

positioning the thermal electric generator so as to be thermally coupled to the fuser assembly.

46. (Withdrawn) The method of claim 43, further comprising:

securing a heat conductive elastomer to the thermoelectric generator so as to be positioned between and contact the assembly.

47. (Withdrawn) The method of claim 42, wherein the assembly comprises:

a fuser assembly including a pair of opposing platen rollers pressed together to form a fusing nip, wherein the actuating member is configured to separate the platen rollers using the electrical energy.

48. (Withdrawn) The method of claim 47, further comprising:

monitoring a parameter level of an electrical energy source;

providing the electrical energy to the actuating member to cause the actuating member to separate the platen rollers upon detecting the parameter level of the electrical energy source is less than or substantially equal to a threshold level.

49. (Withdrawn) A depressurization system configured to receive a first electrical energy having a first parameter level and to couple to a fuser assembly that generates heat and includes a pair of opposing platen rollers pressed together to form a fusing nip, the depressurization system comprising:

a means to convert heat from the fuser assembly to a second electrical energy;

a separating means mechanically coupled to the fuser assembly and configured to separate the platen rollers in response to the second electrical energy;

a controlling means configured to receive the first electrical energy having the first parameter level and the second electrical energy, to monitor the first parameter level, and upon detecting that the first parameter level is less than or substantially equal to a threshold level to provide the second electrical energy to the separating means to thereby cause the separating means to separate the platen rollers.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.